

AMENDMENTS TO CLAIMS

1. (Original) A method for improving the permeability of a well, the method comprising:
selecting a well suspected of containing polymer deposits; and
pumping a well treatment composition into the well, wherein the composition comprises water, a buffer, and hydrogen peroxide or a per-acid.
2. (Original) The method of claim 1, further comprising:
measuring the permeability of the well prior to the pumping step; and
measuring the permeability of the well after to the pumping step.
3. (Original) The method of claim 2, wherein the permeability of the well after to the pumping step is greater than the permeability of the well prior to the pumping step.
4. (Original) The method of claim 1, wherein the composition has a pH of about 3 to about 5.
5. (Original) The method of claim 1, wherein the buffer comprises acetic acid and an acetate salt.
6. (Original) The method of claim 5, wherein the acetate salt is sodium acetate, potassium acetate, or ammonium acetate.
7. (Original) The method of claim 1, wherein the buffer comprises formic acid and a formate salt.
8. (Original) The method of claim 7, wherein the formate salt is sodium formate, potassium formate, or ammonium formate.
9. (Original) The method of claim 1, wherein the buffer comprises citric acid and a citrate salt.
10. (Original) The method of claim 9, wherein the citrate salt is sodium citrate, potassium citrate, or ammonium citrate.
11. (Original) The method of claim 1, wherein the per-acid is peroxyacetic acid.
12. (Original) The method of claim 1, wherein the concentration of hydrogen peroxide in the composition is about 1 weight percent to about 6 weight percent.

13. (Original) The method of claim 1, wherein the concentration of per-acid in the composition is about 1 weight percent to about 15 weight percent.

14. (Original) The method of claim 1, wherein the composition further comprises a peroxidase enzyme.

15. (Original) The method of claim 1, wherein the composition further comprises a phosphate salt or a phosphonate salt.

16. (Original) The method of claim 1, wherein the composition further comprises an iron-control agent, a surface tension reducer, a dispersant, a corrosion inhibitor, or a clay stabilizer.

17-31. (Cancelled)